The LEUCHTER REPORT VINDICATED:

A Response to J. C. Pressac's Critique

by

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In early 1988, American execution hardware expert Fred A. Leuchter, Jr., carried out the first-ever forensic investigation of the alleged extermination gas chambers at Auschwitz, Birkenau and Majdanek. His sensational conclusion—that these structures were never used as gas chambers to kill people—set off an international controversy that is still continuing. In a detailed report, commonly referred to simply as *The Leuchter Report*, the gas chamber specialist summed up the result of his investigation:[1]

> After a study of the available literature, examination and evaluation of the existing facilities at Auschwitz, Birkenau and Majdanek, with expert knowledge of the design criteria for gas chamber operation, an investigation of crematory technology and an inspection of modern crematories, the author finds no evidence that any of the facilities normally alleged to be execution gas chambers were ever used as such, and finds, further, that because of the design and fabrication of these facilities, they could not have been utilized for execution gas chambers.

Not surprisingly, indignant defenders of the orthodox Holocaust extermination story have tried frantically to discredit Leuchter and refute his findings. Undoubtedly the most ambitious effort to impeach *The Leuchter Report* on scientific and technical grounds consists of two articles by French pharmacist Jean-Claude Pressac in a book sponsored by "Nazi-hunter" Beate Klarsfeld, and grandiloquently titled *Truth Prevails: Demolishing Holocaust Denial: The End of the Leuchter Report*.[2] [A review of *Truth Prevails*, which deals with more generally with the book's non-scientific criticisms of Leuchter, is published elsewhere in this issue of the *Journal*. —Editor.]

In *Truth Prevails*, Pressac is described as "one of the world's rare research specialists in gas chamber extermination technique. He is not a Jew and very nearly became a 'revisionist'." (p. 29) At the conclusion of his essay "The Deficiencies and Inconsistencies of 'The Leuchter Report'," Pressac pronounces stern judgement on *The Leuchter Report*:

> . . . Leuchter is the victim of his own errors: layout errors, location errors, measurement errors, drawing errors, methodology errors and historical errors. Based on fake knowledge, inducing fake reasoning and leading to false interpretations, "The Leuchter Report" is inadmissible because it was produced in illegal conditions; because it overlooks the most basic historical data; because it is scuttled by gross errors of calculation, drawing and location; and because it is suspect of falsification. "The Leuchter Report" lands in the cesspool of pretentious human folly. (p. 55)

As this article will show, Pressac, by dismissing *The Leuchter Report's* scientific and technical method so intemperately, has cast a verbal boomerang that returns to strike its author.

I

When Leuchter took forensic samples of brick, mortar and sediment from the alleged extermination "gas chambers" in Auschwitz-Birkenau, as well as a control sample from a camp delousing facility, he wore protective gear. Pressac ridicules him for this:

> To prevent his "precious" samples from being polluted during their removal, Leuchter and his assistant . . . had agreed to wear protective surgical gloves and masks. Since the analyses to be done on the samples were chemical and not bacteriological in nature, this was a perfectly ludicrous and totally useless precaution. (p. 62)

Pressac is ignorant of the real reason why Leuchter and company wore protective masks and gloves. Potassium cyanide, a highly poisonous solid,[3] is found in the walls of some of the facilities under study.[4] As Du Pont chemists have pointed out: "Wear an approved dust respirator when there is danger of inhaling cyanide dust . . . Wear protective gloves

when handling solid cyanide."[5] Thus, Leuchter and his team showed good sense by wearing protective gear when extracting the samples.

Leuchter stored his samples in cool, damp, and sunlight free locations. But Pressac writes: "Since Leuchter placed the samples in transparent plastic bags, it is difficult to accept his 'sunlight free locations' claim." (p. 62) In fact, although Leuchter first placed the samples in transparent bags, he then transported them to America in closed, sunlight-free suitcases.[6] The gas chamber expert wrote: "We boarded the Polish airline plane after clearing customs—my suitcase containing twenty pounds of forbidden samples, fortunately none of which was found."[7]

Leuchter is faulted for allegedly making misleading descriptions of the specimens. In Pressac's words:

> Thirty-one samples . . . were identified by laboratory analysis . . . as coming from "brick"—an inexact generalization. If two-thirds really are brick fragments, either pure or mixed with a bit of mortar, the rest are composed of lime mortar or sometimes of pure cement (as in the case of two or three samples). This abusive generalization leads one to have a major reservation about the very nature of the samples Leuchter took. Either Leuchter was mistaken in his assessment of the substratum, or the laboratory made an error. (p. 61)

In one part of his report, Leuchter wrote: ". . . forensic samples of brick, mortar, concrete and sediment were selectively taken from sites in Poland."[8] In a letter to Alpha Analytical Laboratories (Ashland, Massachusetts), the laboratory which analyzed the samples, Leuchter wrote: "Samples No. 1 through No. 11; Samples No. 13 through No. 32. Brick, mortar and sediment. Cyanate content."[9] Clearly, he did not use the "inexact generalization" of "brick" to characterize the samples.[10]

II

Pressac realizes the importance of the samples taken from the "gas chambers" and the delousing facility. Thus, discrediting Leuchter's method of taking samples and his conclusions regarding their chemical content is really the major purpose of Pressac's two essays in *Truth Prevails*. He writes:

> Since Leuchter's samples were obtained illegally, I will only concur with their cyanide concentration on the express condition that they be verified by official expert chemical evaluation. Admitting their validity with reservations, certain results which may have been surprising at first glance can be logically explained. (p. 40)

A subsequent "expert official chemical evaluation" has in fact strongly corroborated Leuchter's findings. In response to Revisionist claims that Zyklon B was not used at Auschwitz-Birkenau to commit mass murder, the Auschwitz State Museum asked Poland's Institute of Forensic Research (in Krakow) to carry out a scientific investigation of the matter. Its expert report results buttress those of Leuchter: The institute's team found significant potassium cyanide residue in delousing facility samples, while next to none in alleged "gas chamber" samples.[11] (As will be discussed below, the Polish institute's conclusion regarding the significance of this finding differs from Leuchter's.)

Throughout both his essays, Pressac strongly implies that Leuchter consciously falsified his findings in order to disprove the existence of the gas chambers. As a case in point—concerning sample 2 from Crematorium II—Pressac insinuates that Leuchter planted a brick with no cyanide residue in the "gas chamber" area in order to "prove" his case. (p.65)

At the 1989 conference of the Institute of Historical Review, Leuchter publicly challenged the international scientific community to investigate his findings—hardly the behavior of a man who is guilty of falsifying his results.[12] A team of scientists could easily expose deliberate deceptions, as well as methodological errors, by Leuchter. All they would have to do is retrace his path, take more samples from the same facilities, and subject them to chemical analysis.

Leuchter's 1988 investigation of the concentration camps, including his inspection and sample taking, was recorded on videotape. A videotape cassette of his visit, which shows Leuchter taking some of his specimens, is available to the public.[13] Pressac claims throughout his second essay that this video is a "witness to a fraud." (pp. 61-73) He writes, for example: "Manipulation, substitution and trick photography are certainly confirmed in the case of sample No. 6." (p. 68)

With reference to the extraction of this sample, he writes at another point: "The deception seems clearly obvious." (p. 67)

Pressac writes further:

> Out of seven samples obtained from the Crematorium II gas chamber ruins, not a single one was shown upon analysis to contain cyanide. This amazing result is contrary to everything known about the building's history. Faurisson wanted this gas chamber to yield a perfect (for him) result across the board—that is to say, uniformly negative. Playing his cards close to his vest, he succeeded all too well. The results are too consistent, too perfect. (p. 68)

Whatever defects there may be in the videotape record of Leuchter's investigation, it seems unlikely that they are the result of conscious fraud (let alone a plot orchestrated by his arch-enemy Robert Faurisson). Any possible defects there may be are more likely to have been occasioned by inexperience and the circumstances in which the gathering of evidence and the videotaping was conducted. As British historian David Irving has written:

> I myself would, admittedly, have preferred to see more rigorous methods used in identifying and certifying the samples taken for analysis, but I accept without reservation the difficulties that the examining team faced on location in what is now Poland: chiselling out the samples from the hallowed site under the very noses of the new camp guards. The video tapes made simultaneously by the team—which I have studied—provide compelling visual evidence of the scrupulous methods that they used.[14]

Furthermore, as already mentioned, Poland's Institute of Forensic Research (Krakow) has provided independent corroboration of Leuchter's findings. The Institute's investigation team found no cyanide residue in the "gas chamber" samples they took, except for one taken from the Crematorium II ruins. It measures 6 micrograms per 100 grams of material. This is equal to .06 milligrams of cyanide per kilogram of material (mg/kg).[15]

This is less than the minimum amount that could be detected by the measuring instrument of the Alpha laboratory. The minimum trace level of cyanide that could be detected by Alpha was *one* mg/kg.[16] Anything below this

amount was rightly considered inconsequential. Thus, Leuchter's findings are consistent with those of Poland's Institute of Forensic Research: there was no significant cyanide residue in material taken from Crematorium II's "gas chamber."

III

Pressac asks:

> What decisive point of the [Leuchter] report leads the deniers [Holocaust Revisionists] to think they have "won" [the debate about the existence of extermination "gas chambers"]? They compared the quantity of cyanide residue in the Birkenau BW 5a delousing building gas chamber (sample No. 32) yielding 1,050 mg/kg . . . and those varying from 0 to 7.9 mg/kg in samples from the Auschwitz-Birkenau homicidal gas chambers. The result triggers the following line of questioning. How can it be believed that the areas supposedly used to asphyxiate thousands daily by means of hydrocyanic acid over the course of a year or two retain only minute traces of cyanide while other places, used for delousing with the same gas over the same time period, yield traces one hundred and fifty to a thousand times greater? (p. 35)

As Pressac indicates, Leuchter did indeed conclude:

> One would have expected higher cyanide detection in the samples taken from the alleged gas chambers (because of the greater amount of gas allegedly utilized there) than that found in the control sample. Since the contrary is true, one must conclude that these facilities were not execution gas chambers, when coupled with all the other evidence gained on inspection.[17]

In an effort to discredit this conclusion, three explanations have been offered in response:

Explanation 1. After 45 years, virtually all of the cyanide residue in the alleged extermination gas chambers has "weathered away." Poland's Institute of Forensic Research, for example, expressed the view that

> . . . one can hardly assume that traces of cyanic compounds could still be detected in construction materials (plaster,

> brick) after 45 years, after being subjected to the weather and the elements (rain, acid oxides, especially sulfuric oxides). More reliable would be the analysis of wall plaster [samples] from closed rooms which were not subject to weather and the elements (including acid rain).[18]

Writing in *Truth Prevails*, Pressac expresses a similar opinion: "As a general rule, the more a sample's locale was exposed to the elements, the lower—indeed, nil—the cyanide content." He also wrote: "The ruins of Crematorium II and III and the restored walls of IV and V have been exposed to the elements for over forty years. It's practically a miracle that any measurable hydrocyanic compound traces still remain." (pp. 71, 44)

However, in his 1989 book, *Auschwitz: Technique and Operation of the Gas Chambers*, Pressac says something rather different. In this detailed work, he published a picture of the *outside* wall of a delousing chamber. Referring to this structure, he wrote: ". . . from ground level to just below the chimney, bluish stains can be seen on the bricks of the wall, showing that hydrocyanic acid was used there (in 1942-1944), for delousing purposes."[19] He thus confirms that even though this wall has been exposed to the elements since the Second World War, a significant amount of Prussian blue is nevertheless still visible. Pressac himself thus discredits the claim that all or even most of the Prussian blue (ferric ferrocyanide) would have "weathered away."

If Pressac's view on this is correct, the *outside* wall of this delousing facility obviously would have a *lower* Prussian blue content than the *inside* walls of the "gas chamber" of Krema I. In fact, though, visible Prussian blue stains can be seen on the *outside* wall of the delousing facility, which has been exposed to the elements since the Second World War. By contrast, there are only invisible and barely detectable amounts of Prussian blue in samples taken from the *inside* wall of the supposed homicidal "gas chamber" of Krema I, which is inside an intact structure and has thus been protected from the elements since the Second World War.[20] As Pressac himself notes: "Its [Krema I] morgue/ gas chamber inside walls have never been exposed to sun, rain, or snow (factors which contribute to cyanide content diminishing) as the other crematoriums were and are." (p. 44)

Referring to the absence of cyanide/Prussian blue traces in the samples taken from Birkenau's Krema II, Pressac writes in *Truth Prevails*: "Cyanide's solubility in rain water and the water layer accumulated underground from infiltrating rain accounts for its absence from the samples." (p. 41)

This view is simply not correct. Dr. James Roth, the chemistry expert who analyzed Leuchter's samples, pointed out that Prussian blue cannot be washed out of brick, mortar or cement by water. The ferric ferrocyanide compounds produced by the interaction of hydrogen cyanide with the iron elements in brick (and such) are very stable, and remain in such substances for a very long time. As Roth testified under oath, the compounds can be removed only by sand-blasting or the application of strong acid.[21] Nobel Prize-winning chemist Linus Pauling similarly confirms that Prussian blue is insoluble in water.[22] Finally, the authoritative *Handbook of Chemistry and Physics* notes that ferric ferrocyanide—or iron (III) ferrocyanide—is insoluble in hot or cold water.[23]

It should be stressed here that whereas the Institute of Forensic Research (Krakow) measured the amount of *potassium cyanide*,[24] Leuchter was mainly concerned with *Prussian blue* (or ferric ferrocyanide).[25] As previously noted, while Potassium cyanide is indeed water soluble,[26] ferric ferrocyanide is not. Prussian blue is a very stable compound that simply could not have been washed away by rain.

Explanation 2. Pressac suggests that when camp officials dynamited crematory buildings (Kremas) II, III and V, this contributed to the removal of cyanide residue. (pp. 40, 42, 43) This explanation will also not hold up. While it is true that dynamiting breaks up the bricks of a structure, it does not remove chemical stains on or within such bricks. Nor, for the most part, would it abrade Prussian blue on their surfaces. Pressac himself points out that a support pillar in Krema II's "gas chamber" withstood the effects of explosion. (p. 65) Any Prussian blue on the surface of or within the pillar's pores would have remained.

Explanation 3. This is Pressac's principal explanation. Even though the delousing facility was exposed to a lesser amount of HCN than the "gas chambers," the walls of the

delousing facility were impregnated with warm HCN for at least twelve hours a day. He writes:

> This cyanide saturation of 12 to 18 hours a day was strengthened by the heat the stoves in the room emitted, providing a temperature of 30 degrees Celsius [86 degrees Fahrenheit]. The walls were impregnated with hot HCN for at least 12 hours a day, which would induce the formation of a stain: Prussian blue, or potassioferric ferrocyanide [*sic*] . . . (p. 37).[27]

As for the "gas chambers," Pressac alleges the HCN was in physical contact with their walls "for no more than ten minutes a day," at a temperature of about 30 degrees Celsius (86 degrees Fahrenheit). Without additional heat, the brief contact of high concentrations of HCN with the walls of the homicidal installations was not able to induce the reaction which led to the formation of significant amounts of cyanide residue. Hence, the amount of ferric ferrocyanide in the "gas chamber" samples is nil or nonexistent. (pp. 36-38)

If Pressac had made an objective study of the chemistry of hydrogen cyanide and Prussian blue, he would have learned how inaccurate this theory is.

The walls of the alleged gas chambers contain a large amount of iron.[28] And, as Dr. James Roth pointed out: "If iron is present with hydrogen cyanide around, then you are going to get a reaction between the hydrogen cyanide and iron."[29] Hydrogen cyanide dissolves very readily in water, becoming hydrocyanic acid.[30] As Pressac and Leuchter have both noted, the alleged gas chambers were very damp.[31] Enough moisture would have been on the walls, floors and ceilings to dissolve at least some of the HCN supposed to have been used during an alleged gassing.

In the presence of water, iron in the walls and cyanide from the hydrogen cyanide would readily combine to form an iron cyanide complex. Aqueous solutions of hydrogen cyanide are weak acids.[32] As Dr. Pauling notes: "Iron is an active metal, which displaces hydrogen easily from dilute acids."[33] Consequently, the iron from the walls would easily have displaced the hydrogen (H^+) in the hydrocyanic acid, bonded with the cyanide (CN^-], and formed an iron-cyanide complex, ferrocyanide ion $[Fe(CN_6)]^{4-}$. [34] This is what Dr. Pauling meant when he wrote that cyanide ion [CN^-] added to a

solution of ferrous ion [iron (II) ion] forms precipitates which dissolve in excess cyanide to produce complex ions.[35]

Finally, according to Dr. Pauling, the pigment Prussian blue is made by the addition of ferric [iron (III)] ion to a ferrocyanide solution.[36] According to chemist James Brady: "The deep color Prussian blue is formed when a drop of dilute solution containing Fe^{3+} [iron (III) ion] is added to a dilute solution containing ferrocyanide ion, $Fe(CN)_6^{4-}$. After a few moments, the blue precipitate, $Fe_4[Fe(CN)_6]_3.16H_20$, settles to the bottom of the test tube."[37] In plain language, the iron-cyanide complex, ferrocyanide, combines with more iron to form ferric ferrocyanide (or Prussian blue).

What this whole reaction mechanism shows is that even if the HCN were in contact with the "gas chamber" walls for less than ten minutes every day or two for two years, significant quantities of Prussian blue still would have formed. (By a "significant amount" is meant an amount slightly less or equal to that found in the delousing facility samples.) At least some of the HCN, upon contact with the diffuse wetness, would have dissolved immediately.[38] This dissolved HCN, upon contact with the iron, would have formed some ferrocyanide immediately.[39] The ferrocyanide, upon contact with more iron, would have formed some Prussian blue almost immediately.[40]

But just as important, the application of heat to the walls and gas is not at all necessary to form significant amounts of Prussian blue. Relevant to this issue is the informative verbal exchange between attorney Douglas Christie and Dr. James Roth during the 1988 trial in Toronto of Ernst Zündel. Referring to the reaction between hydrogen cyanide and the iron in the walls of the alleged gas chambers, Christie asked Roth: "And could you explain any way by which this would not happen or no such reaction would occur?" The chemist replied:

> ROTH: Well, one is the lack of water. These reactions to—in a lot of cases have to take place in water or with some vapor around. Now, chances are great [that with] *normal temperatures* and rooms of normal humidity, there would be plenty of moisture present for this type of reaction to take place. [Emphasis added]

> CHRISTIE: So in a normal room with normal humidity these quantities of iron in the wall, hydrogen cyanide in quantities of 300 parts per million [.36 g/m^3] or more, on a daily basis for two years or even two weeks, you would expect to see the formation of Prussian blue. Is that correct?
>
> ROTH: I would expect to see detectable amounts of Prussian blue. [If not visibly detectable, at least chemically detectable.] That type of reaction is an accumulative reaction. In other words, as it reacts it doesn't go away. It stays . . .[41]

Pressac's theory that without additional heat the brief contact of high concentrations of HCN with the walls of the gas chambers was not sufficient to form significant amounts of Prussian blue is therefore false.[42] The whole ensemble of physical and chemical conditions would have ensured that significant amounts of Prussian blue residue would have been detectable in Leuchter's samples if they had been exposed to the amount of gas Pressac claims.

IV

The boiling point of hydrogen cyanide (HCN) is 26 degrees Celsius (or 78 degrees Fahrenheit).[43] That is, HCN vaporizes, or changes from liquid to gas, at this temperature. If the temperature is below 78 degrees F, there will thus be condensation: Much of HCN will change from gas to liquid. In addition to being cool year round, the Auschwitz I and II (Birkenau) "gas chambers" were supposedly operated during the cold weather months of fall, winter and spring.[44] They were allegedly ventilated "naturally" or "mechanically." (p. 72)[45] In either case, air from the outside environment would have been used to expel poison gas from the chamber. During the fall, winter and spring months, this outside ventilation air would have been considerably cooler than 78 degrees F. In addition, as Pressac admits and Leuchter confirms, the "gas chambers" had no internal heating devices to prevent condensation.[46] The temperature of the walls, floors and ceilings for much of the year would have been well below 78 degrees F.

During an alleged gassing operation, much of the poisonous HCN gas therefore would have promptly condensed to liquid upon contact with the frigid walls, floors and ceilings, or upon contact with cold air during ventilation.

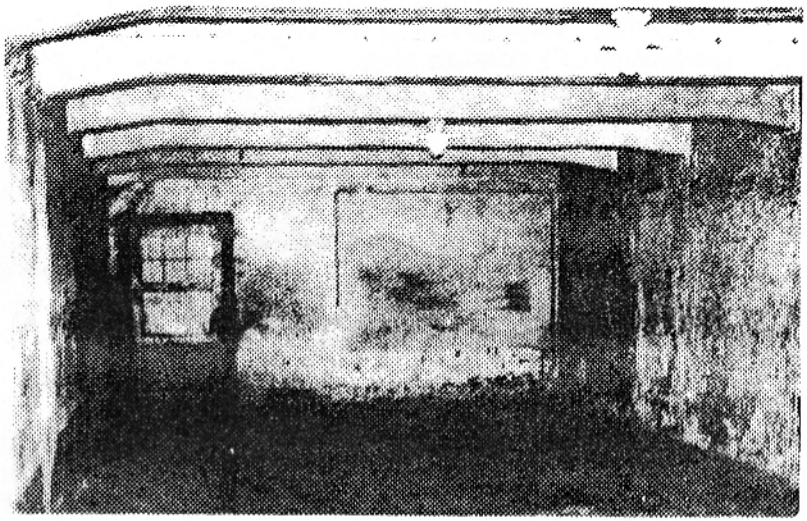
Because HCN gas naturally adheres to surfaces, it can be ventilated only with difficulty and after considerable time.[47] Thus, even if an alleged "gassing" lasted no more than twenty minutes, a considerable amount of condensed, liquid HCN would have remained on the walls, floors and ceilings after ventilation. The cold air allegedly used to ventilate the poison gas would simply have ensured that much of the HCN would have changed to liquid and remained on the inside surfaces of the "gas chambers."

In this vein, Leuchter has noted:

> . . . if the temperature [of the gas chamber] is not above 78 to 79 degrees, we get condensation of the gas on the walls, the floor and the ceiling. When the hydrogen cyanide condenses into a liquid it will be absorbed by the brick and by the mortar . . .[48]

As Dr. Pauling has noted, "Hydrogen cyanide...is a gas which dissolves in water and acts as a very weak acid."[49] In this regard, it is worth pointing out that the Auschwitz-Birkenau "gas chambers" were always damp.[50] Therefore, even during the warm weather months, when the ambient temperature in the "gas chambers" may have been above 78 degrees F, some gaseous HCN would have readily dissolved the moment it came in contact with the natural moisture on the floor, walls and ceiling. In this way, the constant dampness or moisture in the "gas chambers" would ensure that HCN would be held in solution even during the warm weather months.[51] This HCN—dissolved in the moisture or condensed back to liquid—thus would have remained in the "gas chambers" even after ventilation, and would have reacted with the iron in the bricks to form Prussian blue.

According to chemists of the German Degesch company (which manufactured Zyklon), exposed porous surfaces of an authentic (delousing) gas chamber must be coated with a sealant to make the facility impervious to HCN impregnation.[52] Leuchter found that none of the alleged extermination "gas chambers" in Auschwitz was coated with any sealant.[53] If these facilities had actually been used as extermination gas chambers, their walls, floors and ceilings would have absorbed significant quantities of HCN.



Tourists at Auschwitz are routinely told that thousands of Jews were killed with Zyklon B in this alleged extermination gas chamber in the Auschwitz I main camp. German camp authorities never bothered to destroy this incriminating "evidence." (Photo: Samisdat Publishers)

Critical to Pressac's thesis is this claim:

> In a homicidal gas chamber, the action of highly concentrated HCN was rapid and intense (never more than 15 to 20 minutes), at a temperature below 27 degrees C. [80.6 degrees F], then the room was aired or artificially ventilated to get rid of the gas as quickly as possible . . . The acid had time to attack the metallic parts superficially, forming cyanide, but did not have enough time to impregnate and stain the brick. Conversely, the operation of a delousing gas chamber used much lower concentrations of HCN, but as a general rule and according to witnesses, the gas remained for a very much longer time, from 16 to 18 hours, and a higher temperature was maintained by heating the chamber by stoves . . .[54]

This is not accurate. As we have already established, if the structures in question had actually been used as homicidal "gas chambers," the walls, floors and ceilings would have absorbed significant quantities of HCN. The physical and chemical conditions in the alleged "gas chambers" were such that a significant amount of HCN would have remained after

a "gassing," impregnating the brick and forming significant quantities of Prussian blue.

Let us summarize Pressac's thesis with two quotations. In the 1990 work, *Truth Prevails*, he wrote:

> Without heat induction of long continuance, the cyanide doses [in the "gas chambers"], as high as they were, were not in contact with the walls of the homicidal installations long enough to provoke the reaction [forming Prussian blue] to an appreciable—that is to say visible—degree. (p. 38)

And in his 1989 work, *Auschwitz*, Pressac wrote:

> The "blue wall" phenomenon makes it possible now to distinguish visually, empirically, but with absolute certainty, between delousing gas chambers, where the phenomenon is present, and homicidal gas chambers, where it is not. Without additional heat, the too brief contact of nevertheless high concentrations of hydrocyanic acid with the walls of the homicidal installations was not able to provoke the development of the reaction appreciable enough to be visible.[55]

To sum up here: as a consequence of all these factors, HCN would have been in contact with the walls of the "gas chambers" for much more than just ten or twenty minutes a day, and significant amounts of HCN would have remained after gassing and subsequent ventilation. Therefore—and contrary to what Pressac claims—significant amounts of Prussian blue would have been produced.

Leuchter's comparison of samples taken from the "gas chamber" with samples taken from the control/delousing facility samples is entirely valid. If the alleged extermination "gas chambers" had actually been used to kill people as alleged, ferric ferrocyanide would have been found in them in amounts comparable to those found in the delousing facility. As the American gas chamber expert has noted, the point is not that the cyanide traces at the alleged gassing sites are "somewhat less" but that they are

> negligible or nil. The samples from the alleged gas chamber areas, most of them had totally no traces at all. The few that did have traces were barely above detection level. So, we're not talking about a situation that there was more or less. We're talking about nothing and something, and in the area

where there was something [the delousing facility], we had a very high content. We had a thousand and fifty milligrams per kilogram, and the highest that we detected in any of the other areas [the alleged gas chambers] was seven milligrams per kilogram.[56]

V

Pressac claims that only a select few of Leuchter's specimens were taken correctly. The rest are "worthless," allegedly because Leuchter "switched samples" by planting rocks with no cyanide residues in the "gas chamber" area in order to "prove" his case. Pressac also charges that Leuchter confused sample location. (That is, samples designated by Leuchter as coming from one area actually came for another.) And, according to Pressac, the American specialist used "trick photography." (pp. 42-43, 46-48, 61-73)

Let us give Mr. Pressac the benefit of the doubt, and assume that his designation of most of Leuchter's samples as either "worthless" or "valid" is correct. This would mean that remaining "acceptable" specimens include:

Krema III: Sample 9. (p. 69)
Krema V: Sample 24. (p. 71)
Krema I: Samples 25, 26, 27, 28, 29, and 30. (pp. 40, 46, 62)

Fortunately, using just these samples, we can disprove Pressac's theories and show that Leuchter's results are valid.

Consider crematory building (Krema) I in the Auschwitz main camp. The supposed gas chamber there was adjacent to a washroom.[57] The washroom was never part of the "gas chamber."[58] They were separated by a gas-tight door.[59] Both rooms were apparently disinfestated with hydrocyanic acid.[60] Pressac maintains that people were killed in the alleged "gas chamber" there from the end of 1941 until 1942.[61] Prior to this, he believes, it was used as a morgue, and afterwards it was used as an air raid shelter.[62] Hence, it would have been exposed to significant amounts of HCN not only during the period when it allegedly functioned as a homicidal gas chamber, but also as a result of periodic disinfestation treatment during the time it functioned as a morgue and air raid shelter.

According to Pressac, "probably" no more than ten thousand persons were put to death in the alleged "gas chamber" of Krema I.[63] Consequently, this room would have been exposed to significant concentrations of HCN for extended periods of time.[64]

Leuchter found no evidence of any exhaust system, or any other way to expel the gas in a short period.[65] For this reason, it would have taken many hours after each alleged "gassing" operation to ventilate HCN from the chamber. For reasons already given, much HCN would have remained after the ventilation phase of a "gassing" to permeate the walls, floor and ceiling. By contrast, the washroom would have been exposed to the gas only during periodic disinfestations. Clearly, then, the alleged "gas chamber" was exposed to HCN for much longer periods of time than then the washroom.

Pressac's theory predicts that the amount of cyanide residue in a structure would be proportional to the amount of time it was exposed to HCN. He writes:

> The considerable difference in hydrocyanic residue between the delousing stations and the homicidal gas chambers is the result of the respective difference in time spent administering Zyklon (at least 12 hours per day in the delousing versus 5 to 10 minutes every day or two in killing humans). (p. 63)

In the view of Revisionist researcher Enrique Aynat, though:

> . . . Leuchter took one of his samples in an area that had been a washroom, which had never been part of the supposed gas chamber, and was separated from it by a gas-tight door. The partition wall that separated the washroom from the supposed gas chamber was eliminated by the Poles after the war. The analysis of this sample reveals a presence of cyanide *comparable* to that of most of the other samples. In short, the amount of cyanide found in a sample taken from a place that had *never* served as a gas chamber was *similar* to that detected in the samples taken from the supposed gas chamber. If the mortuary had really been a gas chamber, cyanide ought to have been detected in the samples taken from there, and by the same token nothing should have been detected in the sample obtained from the former washroom; or rather a minute amount of cyanide should have been found in the former washroom (from contingent disinfestation with

> hydrocyanic acid) and a much larger quantity in the gas chamber. What proves to be inexplicable from the Exterminationist point of view is the findings of *similar* amounts of cyanide in both places.[66]

This finding strongly suggests that Pressac's theory is false.

Pressac notes that "...sample 9 (Crematorium III, L-Keller 1), taken from the base of a fifth central support pillar, exposed to every imaginable meteorological turpitude for 45 years, still gives a reading of 6.9 mg/kg." (p. 71) Sample 24 was taken from the ruins of an alleged gas chamber of Krema V. Because the building which housed it was razed to the ground in the 1940s, the foundation and floor were exposed to the elements for decades. (p. 44) Therefore, Pressac cannot contend that any difference between the cyanide levels of samples 9 and 24 is due to the "weathering process."

The time periods during which the extermination "gas chambers" of crematory buildings (Kremas) III and V were in operation are similar. The "gas chamber" in Krema III (Birkenau) allegedly operated during much of 1943 and 1944—almost two full years.[67] The "gas chamber" in Krema V (also in Birkenau) supposedly operated from April 1943 until the summer of 1944. (p. 43)

According to Pressac, because there was a mechanical ventilation system in Krema III, sample 9 would have been in contact with the HCN for only five to ten minutes during an alleged gassing operation: "Considering the poisoning time required to asphyxiate the victims in conjunction with the ventilation, the time period during which the walls were exposed to the hydrocyanic acid gas did not exceed 5 to 10 minutes every one or two days." (p. 72) By contrast, in the case of the supposed "gas chambers" of Krema V, he writes:

> Crematorium V's 3 (then 4) gas chamber bloc [*sic*] was aired out naturally, with all the doors open. It clearly took more time than the mechanical ventilation did. The period during which the walls were exposed to the hydrocyanic acid, with the concentration progressively diminishing during the airing out time, had to be one or two hours. (p. 72)

According to Pressac's theory, then, sample 24 should have a significantly higher cyanide content than sample 9, because

of the former's longer exposure time to HCN. Yet just the opposite is the case. Sample 9 has a measured residue of 6.7 mg/kg, while sample 24 has no measurable residue.[68]

In an attempt to explain away this serious discrepancy, Pressac claims that sample 9 stood one meter from one of the four wire mesh columns through which Zyklon B was supposedly introduced into the chamber. This "privileged position," he speculates, could be the cause of the "unusual" cyanide content. (pp. 71-72)

This explanation will not withstand close scrutiny. As noted above, Pressac alleges that HCN was in contact with sample 9 of Krema III for only five to ten *minutes* during a gassing, while sample 24 of Krema V was in contact with the gas one or two *hours* during a gassing operation. Pressac himself wrote: "The substantial difference between the two exposure periods (that of V being 10 to 30 times longer than that of II/III) shows that V's bricks were saturated with hydrocyanic gas much longer than those of II and III." (p. 72) According to his own theory, the HCN would have had more time to form significant amounts of Prussian blue in sample 24 than in sample 9.

The reader may understandably ask: "If the alleged 'gas chambers' were never used for homicidal purposes, why was any cyanide at all found in the samples taken by Leuchter?" Dr. Robert Faurisson provides an answer: "The extremely low levels of cyanide found in some crematoria was likely, in my opinion, to have resulted from disinfection of the premises during the war."[69]

Pressac rejects this explanation as an "often-used lie":

> Hydrocyanic acid is used first and foremost to exterminate such vermin as insect pests [lice] and rodents. Classified as an insecticide and vermin killer, it has no bactericide or germicide properties for use as an antiseptic. Places and things are disinfected with various kinds of antiseptics: solid (lime, lime chloride), liquid (bleach, cresol), gas (formaldehyde, sulfur anhydride). To remove lice from clothing required either an insecticide, or dry steam disinfecting in an autoclave. But a morgue is not disinfected with an insecticide or vermin killer like hydrocyanic acid, as Faurisson foolishly claims . . . Leuchter, who claims to be scientifically trained, whereas Faurisson is not, similarly used this stupidity in his report. (pp. 38-39)

Here Pressac is straining to represent Dr. Faurisson and Leuchter as having ignorantly confused "disinfection" with "disinfestation," although he knows full well that the word "disinfection," in line with the German usage (*Desinfektion*), is used for "delousing."

A standard reference work makes this point about the disease typhus: "The spread of typhus in communities results largely from the fact that infected lice tend to leave persons with high fever, and they evacuate the corpses of those who have died from the disease."[70] As both Revisionists and Exterminationists agree, many thousands died in Auschwitz as a consequence of recurrent typhus epidemics, and the supposed homicidal gas chambers were used as morgues. Because deceased victims of the disease are a direct source of the infected lice, any place where the corpses of typhus victims were kept would therefore be a logical place for disinfestation treatment with Zyklon B. Contrary to what Pressac maintains, it would make perfect sense to periodically delouse the morgues (or supposed "gas chambers"). Indeed, a wartime German document on the use of hydrogen cyanide and Zyklon B (Nuremberg document NI-9098) specifically states that Zyklon B should be used for large-scale fumigations of storerooms.[71]

VI.

Finally, a few miscellaneous comments are in order.

Pressac misrepresents what Leuchter writes about the danger of locating HCN gas chambers adjacent to crematoria:

> Leuchter's last claim about the homicidal gas chambers in connection with the cremation furnaces is that they are incompatible under the same roof. As soon as the door was opened to the area saturated with hydrocyanic acid, the same being without ventilation according to Leuchter, the gas would be spread throughout the crematorium, reaching the lit ovens, and, combined with the air, would have exploded, destroying the entire building. HCN's flammability limits in air are from 5.6% (minimum) to 40% (maximum) in volume (6%-41% according to Du Pont). This signifies that upon contact with a flame there is an explosion if the concentration of hydrocyanic acid in air comprises between 67.2g/m^3, and 480g/m^3. Below 67.2g/m^3 there is no risk, nor is there any at greater than 480g/m^3 because there is not enough remaining oxygen for burning to begin. The SS used doses of 5g/m^3 in delousing and 12-20g/m^3 in killing, well under the 67.2g/m^3

threshold. Their gas chambers and crematoria were not about to explode. Leuchter's "impartial" opinion is based upon an incorrect calculation. (p. 45)

Leuchter was well aware of the very real explosiveness of HCN. As he has pointed out, no execution gas chamber system in the United States has ever been designed for use with Zyklon B because

> . . . a danger of explosion always exists. The overall gas mixture [in a gas chamber] is generally below the lower explosion limit (LEL) of the gas air mixture...but the concentration of the gas at the generator (or as in the case of Zyklon B, at the inert carrier) is much greater and may well be 90% to 99% by volume. This is almost pure HCN and this condition may exist at points of time in pockets in the chamber.[72]

Du Pont company chemists confirm this point: "Hydrogen cyanide is extremely flammable and can be ignited by an open flame, hot surface, or spark . . . Outside closed containers, the gas is likely to form flammable mixtures because of its high volatility."[73] Even if the gas does not explode, it can still burn. Another authoritative source similarly notes: "Small quantities of hydrogen cyanide can be burned in a hood in an open metal vessel. Large-scale burning in outdoor pans can be performed, but special safety precautions must be employed."[74]

Leuchter has also pointed out the alleged extermination gas chambers were not properly sealed.[75] Gas would have leaked out, and some of the escaping HCN gas would have reached the ovens, ignited, and burned in the air—all the way to the source of the leaks in the "gas chamber." If the burning HCN reached a pocket of the gas within the explosive limits, an explosion would have occurred. Because this scenario is quite plausible, Leuchter stated: ". . . I wouldn't even want to be present within the vicinity of the building [which housed the alleged gas chambers] if someone were using Zyklon B and the crematory was functioning."[76] Simply put, it would have been extremely dangerous to carry out a homicidal gassing operation near a functioning crematory. A disaster would be likely.

With regard to another issue of contention, Pressac writes:

> The nature of the substrata is not sufficiently taken into account, to the extent of evading the issue, and is grouped under the heading of "brick" by the Analysis laboratory. In the case of L-Keller 1 of crematoriums II and III, the German construction documents attest that the "cellar" walls were built with 400 bricks per cubic meter, with mortar mixed at the ratio of 1/1/5, which measures one part cement and one part lime for every five parts of sand. The pillars were poured of 1/5 reinforced concrete, meaning one part cement to every five parts of sand. The interior partitions, pillars and ceiling all received a coat of roughcast (about 1 to 1.5 cm thick), comprising 17 liters of mortar. Its composition was 1/0.5/5, meaning one part cement and one half part lime for every 5 parts sand. The L-Keller 1 wall bricks which are visible today were covered throughout the war with a roughcast which has since fallen off. These bricks were never directly exposed to the gas. Leuchter's samples of the exposed bricks in the "cellar" are not worth very much in view of the feeble impression the hydrocyanic acid made on their surfaces. (p. 73)

An official wartime information sheet on the use of hydrogen cyanide and Zyklon B confirms that HCN has "extraordinarily great penetrative powers." This sheet (Nuremberg document NI-9912) was issued by the public health agency of Bohemia-Moravia.[77] Even if the roughcast had been present during the alleged homicidal gassings, HCN would have penetrated through to the iron in the bricks beneath it, ultimately producing a significant quantity of Prussian blue.

Also noteworthy in this regard is the observation of Poland's Institute of Forensic Research concerning the Auschwitz delousing facilities: "According to our information, these rooms were whitewashed during the war years. In some spots, a blue or dark blue stain shows through."[78] As Dr. Roth pointed out, the reaction between HCN and iron will go fairly deep in porous substances (like roughcast) unless perhaps the surface formation of Prussian blue inhibited its further penetration.[79] Indeed, the *outside* wall of a Birkenau delousing facility had Prussian blue stains.[80] Apparently, the gas penetrated from the inside of the chamber to the outside surface of the bricks. Any paint or roughcast on the inside surface did not prohibit HCN penetration.

Another criticism of the *Leuchter Report* has been made by Mr. Charles Provan, an American lay theologian and contributor to the weekly *Christian News*. He has alleged that certain "eyewitnesses" have claimed that the chambers were washed down with water after the homicidal gassings. This water supposedly would have washed away the HCN, preventing it from reacting with the iron.[81]

Since HCN has great penetrating powers and the "gas chamber" surfaces were porous, at least some hydrogen cyanide would have penetrated far enough into the roughcast and brick to escape being washed away. Furthermore, HCN is water soluble. After the hosing down, numerous water droplets, containing dissolved HCN, would have remained on the walls, floors and ceilings to react with the iron, ultimately forming significant amounts of Prussian blue.

Conclusion

Based on spurious knowledge, inducing specious logic which leads to false conclusions, Pressac's attacks on *The Leuchter Report* stem from faulty scientific and technical understanding, and thus utterly fail to demolish it. As already noted, since the publication of *Truth Prevails*, a study by Poland's leading forensic institute has given strong corroboration to Leuchter's findings, and thus to his methodology.

Pressac's *ad hominem* attacks on Leuchter and Faurisson, who by daring to subject the gas chamber myth to scientific and technical investigation, have risked their livelihoods, their personal freedom, and even their lives, will, one hopes, strike future generations of readers as no less obscurantist than the attacks directed at Galileo, at Darwin, or at the geneticists who dared to defy Lysenko during the Stalin years. May *The Leuchter Report* help to free, not only the Western world, but the entire literate world from the chains of an oppressive illusion—the lie of the Hitler gas chambers.

Notes

The author would like to express special thanks to a retired Standard Oil research chemist who wishes to remain anonymous, and to Dr. William Lindsey. Their knowledge and expertise were very helpful. Any mistakes or errors in this article are, of course, the sole responsibility of the author.

1. *The Leuchter Report: The First Forensic Examination of Auschwitz* (London: Focal Point, 1989). With foreword by David Irving, and introduction by Robert Faurisson. Page 10. Hereafter, this work will be cited as *The Leuchter Report*.

2. Shelly Shapiro, editor, *Truth Prevails: Demolishing Holocaust Denial: The End of "The Leuchter Report"* (New York: Beate Klarsfeld Foundation and Holocaust Survivors & Friends, 1990). Distributed by: Holocaust Survivors & Friends in Pursuit of Justice, 800 New Loudon Rd., #400, Latham, NY 12110. Pressac's two articles are "The Deficiencies and Inconsistencies of 'The Leuchter Report'," (pp. 31-60), and "Additional Notes: Leuchter's Videotape: Witness to a Fraud" (pp. 61-73). Hereafter, all page numbers cited in the main text of this article refer to *Truth Prevails*. For a good review of Pressac's contribution to this book, see the May-June 1991 issue of *Remarks*, available for $3 postpaid from Jack Wikoff, P.O. Box 234, Aurora, N.Y., 13026.

3. Robert C. Weast, ed., *Handbook of Chemistry and Physics: A Ready-Reference Book of Chemical and Physical Data*, 57th edition. (Cleveland: CRC Press, 1976), p. B-144. Hereafter, this book will be cited as *Handbook of Chemistry and Physics*.

4. Institute of Forensic Research (Krakow, Poland), "An Official Polish Report on the Auschwitz 'Gas Chambers,' " *The Journal of Historical Review*, Summer 1991 (Vol. 11, No. 2), pp. 207-216.

5. "Sodium Cyanide: Properties, Uses, Storage and Handling," p. 7. This Du Pont company information sheet is reprinted in facsimile in *The Leuchter Report* (London: 1989), pp. 33-38. See p. 37.

6. Leuchter letter to Alpha Analytical of March 9, 1988. Reprinted in facsimile as an appendix in *The Leuchter Report* (London), p. 31.

7. Fred Leuchter, "The Leuchter Report: The How and Why," *The Journal of Historical Review*, Summer 1989 (Vol. 9, No. 2), p. 137.

8. *The Leuchter Report* (London), p. 15.

9. Leuchter letter of March 9, 1988 to Alpha Analytical. Reprinted as an appendix in *The Leuchter Report*, p. 31.

10. The term "cyanate content" is a mistake. Leuchter wanted to know the *cyanide* content, not *cyanate* content. The two are different.

11. Institute of Forensic Research (Krakow, Poland), "An Official Polish Report on the Auschwitz 'Gas Chambers,'" *The Journal of Historical Review*, Summer 1991 (Vol. 11, No. 2), pp. 212-213.

12. See the videotape of Leuchter's lecture in the videotape recording, "Highlights of the 9th IHR conference" (Feb. 1989). Available from the Institute for Historical Review, Videotape V-048.

13. Videotape "Fred Leuchter in Poland" (VT-003). Available from David Clark, P.O. Box 726, Decatur, Ala., 35602. This videotape, produced under the name of Samisdat (Toronto), does not show the entire visit.

14. See David Irving's foreword to the London (Focal Point) edition (1989) of *The Leuchter Report*, p. 6.

15. See footnote 11.

16. F. Leuchter, *The Leuchter Report*, p. 21. See also: Robert Lenski, *The Holocaust on Trial: The Case of Ernst Zündel* (Decatur, Ala.: Reporter Press, 1990), p. 394. Hereafter, this book is cited as *The Holocaust on Trial*.

17. *The Leuchter Report*, p. 15.

18. Institute of Forensic Research (Krakow, Poland), "An Official Polish Report on the Auschwitz 'Gas Chambers'," *The Journal of Historical Review*, Summer 1991, pp. 213-214.

19. Jean-Claude Pressac, *Auschwitz: Technique and Operation of the Gas Chambers* (New York: Beate Klarsfeld Foundation, 1989), p. 59. Hereafter cited as: Pressac, *Auschwitz* (1989).

20. *The Leuchter Report*, pp. 21-22.

21. Robert Lenski, *The Holocaust on Trial: The Case of Ernst Zündel* (1990), pp. 395-396.

22. Linus Pauling, *General Chemistry* (New York: Dover Publications, 1988), p. 706.

23. *Handbook of Chemistry and Physics*, 57th ed., p. B-120.

24. See footnote 11.

25. Fred Leuchter, "The Leuchter Report: The How and Why," *The Journal of Historical Review*, Summer 1989 (Vol. 9, No. 2), pp. 138-139.

26. *Handbook of Chemistry and Physics*, 57th ed., p. B-144.

27. The scientific name of Prussian blue is ferric ferrocyanide. The elemental potassium which Pressac says is part of the compound is actually an impurity. See: *Encyclopedia of Chemical Technology*, 3rd ed., Vol. 13, p. 769.

28. See the compiled data from Alpha Analytical Laboratories given as an appendix to *The Leuchter Report*, p. 21. See also Dr. Roth's statements in: R. Lenski, *The Holocaust on Trial*, p. 394.

29. R. Lenski, *The Holocaust on Trial*, p. 395.

30. "Zyklon B for Pest Control," Degesch company booklet, p. 5. This entire booklet is reprinted in facsimile as an appendix in *The Leuchter Report* (London, 1989), pp. 49-62. See p. 51.

31. J.-C. Claude Pressac, *Auschwitz* (1989), pp. 208, 215, 284-285. Leuchter also observed that the "gas chambers" were cool and damp. See *The Leuchter Report*, pp. 13, 16, 17. See also R. Lenski, *The Holocaust on Trail*, p. 375. Filip Müller, an alleged "operator of the gas chamber," claimed: "Normally the concrete floors in the gas chamber as well as in the changing room were damp." See: F. Müller, *Eyewitness Auschwitz: Three Years in the Gas Chambers* (New York: Stein and Day, 1979), pp. 82-83.

32. "Hydrogen Cyanide: Storage and Handling," Du Pont company information sheet (1983), p. 2. This sheet is reprinted as an appendix in *The Leuchter Report* (London), pp. 39-44. See p. 41.

33. Linus Pauling, *General Chemistry* (1988), p. 690.

34. P.W. Atkins, *General Chemistry* (New York: Scientific American, 1989), p. 780.

35. Linus Pauling, *General Chemistry* (1988), p. 691.

36. L. Pauling, *General Chemistry* (1988), p. 692.

37. James Brady, *General Chemistry: Principles and Structure*, 5th ed. (New York: John Wily, 1990), p. 704. Dr. Brady also notes: "It is interesting that exactly the same compound is formed if a solution containing Fe^{2+} [iron (II) ion] is added to a solution containing $Fe(CN)_6^{3-}$ ion [ferricyanide ion]." *The Encyclopedia of Chemical Technology*, 3rd ed., Vol. 13, p. 769, provides clarification. It lists the following reactions.

excess $Fe^{3+} + K_2[Fe(CN)_6]$ ---> insoluble Prussian blue

excess $Fe^{2+} + K_3[Fe(CN)_6]$ ---> insoluble Turnbull's blue

They point out that insoluble Prussian blue and insoluble Turnbull's blue are the same substances. See also James E. Huheey, 3rd ed., *Inorganic Chemistry: Principles of Structure and Reactivity* (New York: Harper and Row, 1983), p. 522. The following are the chemical equations used to describe the formation of ferric ferrocyanide, or Prussian blue.

1) Fe^{3+} + 6CN- ---> $[Fe(CN)_6]^{4-}$
Ferrous ion, iron (II) ion — cyanide ion — ferrocyanide ion

2) 3 $[Fe(CN)_6]^{4-}$ + $4Fe^{3+}$ ---> $Fe_4[Fe(CN)_6]_3$
ferrocyanide — ferric ion — Prussian blue

Sources: Linus Pauling, *General Chemistry* (1988), pp. 673, 691-692; P.W. Atkins, *General Chemistry* (1989), p. 780; James E. Brady, *General Chemistry* (1990), p. 704; James E. Huheey, 3rd ed., *Inorganic Chemistry: Principles of Structure and Reactivity* (New York: Harper and Row, 1983), pp. 521-522; William Nebergall, Frederic Schmidt, Henry Holtzclaw, *College Chemistry with Qualitative Analysis*, 5th ed., (Lexington, Mass: D.C. Heath, 1976), p. 909; William Brown, Elizabeth Rogers, *General, Organic, and Biochemistry*, 3rd ed., (Belmont, CA: Wadsworth, 1987), pp. 561A-561B.

38. See footnote 30.

39. See footnotes 33, 34 and 35.

40. See footnote 36 and 37.

41. R. Lenski, *The Holocaust on Trial*, p. 396.

42. Pressac's theory is further undermined by the observation of Degesch company chemists: "Hydrocyanic acid dissolves very readily in water. Compared with liquid hydrocyanic acid, the gas is chemically very indifferent, and even in highly concentrated form under prolonged exposure it does not show a tendency to react with other substances." From: "Zyklon for pest control" Degesch company booklet, p. 5. Published in facsimile as appendix to *The Leuchter Report* (London), p. 51. This statement suggests prolonged exposure of the gas with the walls is not what would cause the formation of large amounts of Prussian blue. The gas becomes reactive when it dissolves in water or condenses to liquid.

43. Information provided by the Dupont and Degesch companies, published as appendices in *The Leuchter Report* (London, 1989), pp. 41, 51.; *Handbook of Chemistry and Physics*, pp. B-117, F-135.

44. J.-C. Pressac, *Auschwitz* (1989), pp. 131-132, 183, 223, 224, 264, 284-285, 289, 375, 379, 392; Fred Leuchter, *The Leuchter Report*, pp. 13, 16, 17; Robert Lenski, *The Holocaust on Trial*, pp. 367, 375, 377.

45. Note also: J.-C. Pressac, *Auschwitz* (1989), pp. 16, 183, 223, 224, 284-285, 289, 355-376, 384-386, 489.

46. F. Leuchter, *The Leuchter Report*, pp. 13, 16, 17. Nowhere in *Auschwitz* (1989) does Pressac show the "gas chambers" had any internal heating devices to prevent condensation.

47. Nuremberg document NI-9912. Published in English translation as an appendix to *The Leuchter Report*, (London), pp. 23-25, and in J.-C. Pressac, *Auschwitz* (1989), pp. 18-20. Original German-language text is published in: Udo Walendy , ed., *Auschwitz im IG-Farben Prozess* (Vlotho: Germany, 1981), pp. 66-72.
Dr. Robert Faurisson was the first person to publish document NI-9912, and to stress the importance of both NI-9912 and NI-9098. Writing in the Paris daily, *Le Monde* (Jan. 16, 1979, p. 13), he stated: "The industrial documents [NI-9098 and NI-9912] establish that Zyklon B *was not* among those gasses which were described as 'ventilatable'; on the contrary, its manufacturers were obliged to admit that it was 'difficult to ventilate since it adheres to surfaces'." These two documents are referred to by Dr. Faurisson in his interview/ essay, published in *The Journal of Historical Review*, Winter 1981, pp. 324, 356-357. See also Faurisson's essay in *The Journal of Historical Review*, Spring 1991, p. 39.

48. Lenski, *The Holocaust on Trial*, p. 377.

49. L. Pauling, *General Chemistry*, p. 288. HCN is soluble in water in all proportions. See *Handbook of Chemistry and Physics*, 57th ed., p. B-117.

50. See footnote 31.

51. That the humidity in the air would "collect" the HCN and make it react with the iron in the walls is suggested by this statement of Degesch chemists: "In case of high relative humidity of air, it may happen that blank-polished surfaces of metal get tarnished, particularly in case of somewhat higher concentration of gas." See *The Leuchter Report* (London), p. 51.

52. "Zyklon For Pest Control," Degesch company booklet, p. 25. Reprinted as appendix in *The Leuchter Report* (London), p. 61.

53. *The Leuchter Report*, p. 13.

54. J.-C. Pressac, *Auschwitz* (1989), p. 59.

55. J.-C. Pressac, *Auschwitz* (1989), p. 53.

56. R. Lenski, *The Holocaust on Trial*, p. 366.

57. J.-C. Pressac, *Auschwitz* (1989), pp. 131, 159.

58. J.-C. Pressac, *Auschwitz* (1989), p. 131; R. Lenski, *The Holocaust on Trial*, p. 375. Sample 28 was taken from the washroom. It was never a part of the presumed gas chamber. To confirm this, compare Leuchter's diagram of Krema I (p. 28 of *The Leuchter Report*) with Pressac's diagram of the same in *Auschwitz*, p. 159.

59. J.-C. Pressac, *Auschwitz* (1989), p. 131.

60. Pressac evidently does not think the washroom or morgue/"gas chamber" was ever deloused with Zyklon B. However, sample 28 (from the washroom) contains a minuscule amount of cyanide residue. What accounts for this? Since Pressac admits the washroom was never used as a "gas chamber," the presence of cyanide in this specimen can only be due to the fact that it was treated at least once with Zyklon B during delousing/disinfestation. See footnote 58. Pressac himself suggests that virtually every building in Auschwitz--Birkenau was deloused with Zyklon B at one time or another. See: J.-C. Pressac, *Auschwitz* (1989), pp. 188, 201.

61. J.-C. Pressac, *Auschwitz* (1989), p. 132.

62. J.-C. Pressac, *Auschwitz* (1989), pp. 131-132.

63. J.-C. Pressac, *Auschwitz* (1989), p. 132.

64. 12 g/m^3 (grams per cubic meter) is the concentration of the HCN allegedly used in a homicidal gassing. $5g/m^3$ was the concentration used in a disinfestation. See J.-C. Pressac, *Auschwitz* (1989), p. 16.

65. R. Lenski, *The Holocaust on Trial*, p. 375. Pressac claims that one or two extractor fans may have been installed in the ceiling. Even if this were true, much HCN would have still remained behind after the ventilation phase of an alleged gassing. See J.-C. Pressac, *Auschwitz*, (1989), p. 132.

66. Enrique Aynat, "Neither Trace Nor Proof," *The Journal of Historical Review*, Summer 1991 (Vol. 11, No. 2), pp. 182-183.

67. J.-C. Pressac, *Auschwitz*, pp. 183, 264.

68. *The Leuchter Report*, pp. 21-22.

69. Introduction by R. Faurisson to *The Leuchter Report* (London), p. 7.

70. "Typhus," by Herbert Kondo, in: *Grolier Universal Encyclopedia*, 1966 edition.

71. See footnote 47.

72. *The Leuchter Report*, p. 12.

73. "Hydrogen Cyanide: Storage and Handling," Du Pont company information sheet, pp. 1, 8. This sheet is reprinted as an appendix in *The Leuchter Report* (London), pp. 39-44. See pp. 40, 44.

74. Kirk, R.E. and Othmer, D.F., *Encyclopedia of Chemical Technology*, Third Edition, 7, p. 316.

75. *The Leuchter Report*, pp. 16, 17.

76. R. Lenski, *The Holocaust on Trial*, p. 367.

77. See footnote 47. Specifically, see *The Leuchter Report* (London), p. 23.

78. "An Official Polish Report on the Auschwitz 'Gas Chambers'," *The Journal of Historical Review*, Summer 1991 (Vol. 11, No. 2), p. 211.

79. R. Lenski, *The Holocaust on Trial*, pp. 395-397.

80. J.-C. Pressac, *Auschwitz* (1989), p. 59.

81. Audiotape, "Hoffman Interviews Provan," Summer 1991. Available from Wiswell Ruffin House, P. O. Box 236, Dresden, NY 14441.